

CLAIMS:

1. A lighting system, comprising:

a light emitting element located between a reflective
5 element and an output element, wherein the reflective element
reflects light incident to the reflective element, and wherein
the output element outputs light emitted by the light emitting
element; and

a direction shifting element located between the
10 reflective element and the output element, wherein the
direction shifting element reflects or refracts light incident
to the direction shifting element, thereby shifting the
direction of light incident to the direction shifting element.

15 2. The lighting system according to claim 1, wherein the
direction shifting element reflects or refracts light incident
to the direction shifting element so that light emitted by the
light emitting element reaches an interface between the light
emitting element and the output element at an angle that is
20 less than the critical angle at the interface.

3. The lighting system according to claim 2, wherein the
light emitting element and the direction shifting element
overlap one another with respect to a direction perpendicular
25 to the interface.

4. The lighting system according to claim 1, further
comprising an interface between the light emitting element and
the direction shifting element.

30 5. The lighting system according to claim 4, wherein the
direction shifting element has a refractive index different
from that of the light emitting element.

35 6. The lighting system according to claim 5, wherein the

refractive index of the direction shifting element is less than the refractive index of the light emitting element.

7. The lighting system according to claim 1, wherein the
5 direction shifting element is a prism.

8. The lighting system according to claim 1, wherein the direction shifting element includes a plurality of particles.

10 9. The lighting system according to claim 8, wherein the particles are dispersed.

10. The lighting system according to claim 1, wherein the surface of the direction shifting element is specular, and
15 wherein the direction shifting element reflects light incident to the direction shifting element.

11. The lighting system according to claim 1, further comprising a substrate, wherein the light emitting element is
20 located between the substrate and the output element.

12. The lighting system according to claim 1, wherein the light emitting element is an electroluminescent element.

25 13. The lighting system according to claim 12, wherein the reflective element and the output element are electrodes, and wherein the electroluminescent element emits light when a voltage is applied to the electrodes.

30 14. The lighting system according to claim 12, wherein the electroluminescent element includes an organic electroluminescent material.

15. A display, comprising:
35 a lighting unit, wherein the lighting unit includes:

a light emitting element located between a reflective element and an output element, wherein the reflective element reflects light incident to the reflective element, and wherein the output element
5 outputs light emitted by the light emitting element;

a direction shifting element located between the reflective element and the output element, wherein the direction shifting element reflects or refracts light incident to the direction shifting element, thereby
10 shifting the direction of light incident to the direction shifting element; and

a display unit located on or above the output element, wherein the display unit displays an image by using light outputted from the output element.

15 16. The display according to claim 15, wherein the display unit includes a plurality of liquid crystal elements.

20 17. The display according to claim 15, wherein the direction shifting element reflects or refracts light incident to the direction shifting element so that light emitted by the light emitting element reaches an interface between the light emitting element and the output element at an angle that is less than the critical angle at the interface.

25 18. The display according to claim 17, wherein the light emitting element and the direction shifting element overlap one another with respect to a direction perpendicular to the interface.

30 19. The display according to claim 15, further comprising an interface between the light emitting element and the direction shifting element.

35 20. A display, comprising:

a plurality of first electrodes, which extend parallel to each other and are generally located in a plane;

a plurality of second electrodes, which extend in a direction perpendicular to the first electrodes and are
5 generally located in a plane;

a plurality of light emitting elements, wherein each light emitting element is located between one of the first electrodes and one of the second electrodes, wherein the light emitting element emits light when a voltage is applied to the
10 corresponding first and second electrodes; and

a direction shifting element located between the plane of first electrodes and the plane of second electrodes, wherein the direction shifting element reflects or refracts light incident to the direction shifting element, thereby shifting
15 the direction of light incident to the direction shifting element.